

## ABSTRACT OF THE DISCLOSURE

There is provided a method of preparing an oil sample for X-ray fluorescence analysis of the concentration of sulfur in the oil sample at a minimum limit of determination of about 10 to 30 ppb by 5 concentrating sulfur through sedimentation or filtration. A liquid catalyst 15 from which S was removed almost completely is used, whereby S contained in an oil sample 16 is extracted, sedimented and concentrated as a silver sulfide-containing sulfur compound 18.